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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,971	09/15/2006	Tomohiro Oshiyama	KON-2116	2761
20311 7590 03/11/2010 LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016				
EXAMINER NGUYEN, VU ANH				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
03/11/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

# Office Action Summary

**Application No.**

10/598,971

**Applicant(s)**

OSHIYAMA ET AL.

**Examiner**

Vu Nguyen

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-11 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)  
Paper No(s)/Mail Date 09/15/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

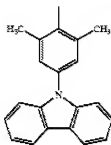
A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2 and 12-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Stossel et al. (US 2004/0058194).

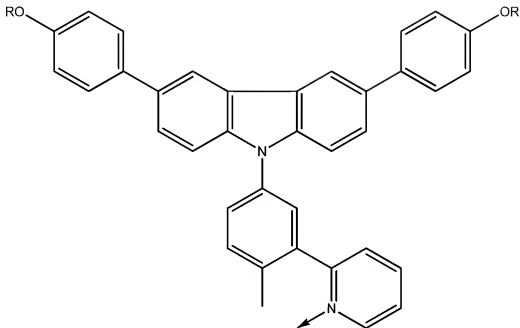
4. Corresponding to the limitations set forth in these claims, Stossel et al. discloses an organic EL element comprising a boron or aluminum compound. In one specific example (p. 8), the compound has the following organic moiety directly attached to boron:



Said compound reads on claims 1 and 2. The organic EL element comprising an emission layer (claim 9) and a hole-blocking layer (claim 10). Display device and illumination device are also taught [0009 & 0025].

5. Claims 1, 2 and 12-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Lo et al. (WO 03/079736).

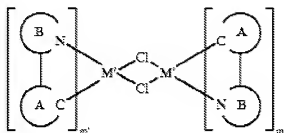
6. Corresponding to the limitations set forth in these claims, Lo et al. (Lo, hereafter) discloses an organic EL device comprising at least one layer that contains a phosphorescent organometallic dendrimer. In one specific example, the dendrimer has the structure  $\text{IrX}_3$ , where X has the following structural representation (Figure1, compound 5):



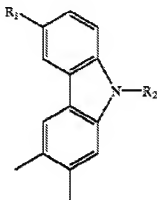
Said dendrimer reads on the metal complex of claims 1 and 2. The device comprises an emission layer and a hole-blocking/electron-transporting layer (p. 14).

7. Claims 1 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamatani et al. (WO 02/044189). *Notes: US 2003/0068526 is being relied upon as an English equivalent of WO 02/044189.*

8. Corresponding to the limitations set forth in these claims, Kamatani et al. discloses an organic EL device comprising at least one layer that contains a metal coordination compound. In one specific example, the compound is represented by the following formula [0041]:



wherein M' denotes a metal such as Ir or Rh, m' is 2, and the moiety A includes the following species (Cz on page 10):



wherein  $R_1 = H$  and  $R_2 = C_2H_5$  (compound # 751 in Table 22). Said compound reads on the complex of claim 1. The device comprises an emission layer (Figure 1b) and an electron-transport layer that also serves as a hole-blocking layer [0106]. Display device and illumination device are also taught [0001].

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (WO 03/079736).

12. Regarding the limitations set forth in these claims, the organic EL element of claim 12 has been shown to be anticipated by Lo as discussed above. Lo fails to teach a display device and an illumination device comprising the disclosed OLED.

Nevertheless, since use of OLED in display device and illumination device are so well known in the art, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed the disclosed OLED to fabricate display device and illumination device so as to facilitate the marketability of the OLED.

#### ***Allowable Subject Matter***

13. Claims 3-11 are allowed.

14. The following is an examiner's statement of reasons for allowance: None of the prior art references of record teach the organic EL material of claim 3..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Nguyen whose telephone number is (571)270-5454. The examiner can normally be reached on M-F 7:30-5:00 (Alternating Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Nguyen

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Examiner  
Art Unit 1796

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796